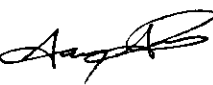


January 30, 2001

## **MEMORANDUM**

TO: Stephen West, Administrator  
Boise Regional Office

FROM: Gary Gates, Air Quality Analyst   
State Technical Services Office

SUBJECT: **PERMIT TO CONSTRUCT MODIFICATION TECHNICAL ANALYSIS**  
P-000083, Boise Cascade, Emmett  
(PTC #045-00001 Modification for Plywood Sander Baghouse)

### **PURPOSE**

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200 (*Rules for the Control of Air Pollution in Idaho*) for Permit to Construct (PTC) requirements.

### **PROJECT DESCRIPTION**

Boise Cascade is requesting that the permit limits for the Plywood Sander Baghouse be modified to more accurately limit it to the potential to emit. PTC #045-00001 was issued for the baghouse on July 8, 1999. The permitted hourly emission limit was significantly higher than the maximum potential rate for the baghouse and was causing modeled concentrations to approach the National Ambient Air Quality Standards (NAAQS) for PM<sub>10</sub>. The reduction of the hourly limit is based on the maximum potential production rate.

### **SUMMARY OF EVENTS**

On May 9, 2000 the Idaho Department of Environmental Quality received an exemption concurrence request from Boise Cascade for the shavings bin. On August 10, 2000 the application was determined to be complete. On October 31, 2000 a request to modify PTC #045-00001 and a detailed modeling analysis was submitted.

### **DISCUSSION**

#### **1. Process Description**

Boise Cascade proposes to remove an existing truck loading shavings bin (TP4) and replace it with a new truck loading shavings bin at a new centrally located site within the facility. The new shavings bin would include installation of new high-pressure pneumatic piping to transfer wood byproduct to a new cyclone and baghouse associated with the truck loading shavings bin. The baghouse will be controlling the emissions that are produced by the cyclone. The old truck loading shavings bin did not have a baghouse associated with the cyclone.

In processing the exemption request, DEQ discovered modeled concentrations of PM<sub>10</sub> to be near NAAQS levels. Further review found that the previously permitted Plywood Sander Baghouse had been given higher hourly limits than could be potentially achieved by the baghouse. In an attempt to give Boise Cascade maximum flexibility for the baghouse operations, DEQ overestimated the potential to emit and the PM<sub>10</sub> ambient concentration for the source and the facility. PTC #045-00001 will be modified to set the limits for the Plywood Sander Baghouse at more accurate levels. With the PTC modification the new shavings bin relocation project will be exempted.

#### **2. Equipment Listing**

The equipment associated with this modification is the Plywood Sander Baghouse.

#### **3. Emission Estimates**

Boise Cascade has requested a lower hourly emission limit for the Plywood Sander Baghouse, thus the hourly potential to emit from the source will decrease. As requested, the limit for PM<sub>10</sub> will be reduced from three pounds per hour (3 lb/hr) to 0.02 lb/hr. The original permit limited the annual emissions to one ton per year (1 T/yr). Boise Cascade is requesting to change the limit to 0.08 T/yr to reflect the hourly rate at 8760 hours

per year of operation. Under the old permit the annual limit should have been 13.14 T/yr at the allowed 8760 hours of operation. The new emission limits were the numbers that were modeled.

4. Modeling

ISC-PRIME modeling was performed by Boise Cascade for the Plywood Sander Baghouse and the proposed shavings bin baghouse due to NAAQS concerns that arose from the overestimation of the hourly and annual emission rates of the Plywood Sander Baghouse. The modeling indicated that the maximum  $PM_{10}$  concentration for the Plywood Sander Baghouse is 32.8  $\mu\text{g}/\text{m}^3$  for an annual averaging period, and 86.4  $\mu\text{g}/\text{m}^3$  for a 24-hour averaging period with state-wide background added into the totals. Both are below the NAAQS.

5. Facility Classification

Boise Cascade is a timber and wood products facility, SIC 2436. The facility is classified as a major facility (Class A), and the facility is not a designated facility.

6. Area Classification

The facility is located in Air Quality Control Region (AQCR) 63. The area is classified as attainment or unclassifiable for all criteria pollutants.

7. Regulatory Review

IDAPA 58.01.01.209

Procedures For Issuing Permits

The permit will be revised as provided in 209.04. The revised permit will be issued pursuant to procedures for issuing permits as described in this section.

IDAPA 58.01.01.585

Ambient Air Quality Standards For Specific Air Pollutants

Modeling indicates that all air quality standards will be met in this project.

8. AIRS Information

This is an modification to an existing source. The permitted limits of the Plywood Sander Baghouse will now be 0.02 lb/hr and 0.08 T/yr.

9. Permit Coordination

The modification to this PTC will be incorporated into the facility's draft Title V Permit prior to issuance for public comment.

10. Fees

Boise Cascade is a major facility as defined in IDAPA 58.01.01.008.10, and therefore is subject to registration and registration fees in accordance with IDAPA 58.01.01.526.

RECOMMENDATION

Based on review of application materials and all applicable state and federal rules and regulations, staff recommend that DEQ issue an modified PTC #045-00001 to replace the permit issued July 8, 1999 for the Plywood Sander Baghouse. No public comment period is recommended, no entity has requested a comment period, and the project does not involve PSD requirements.

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cc: Boise Regional Office

DEQ State Office